

Present status of fisher community of Jamuna river in Sariakandi, Bangladesh

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ABSTRACT

The present study was conducted to assess the livelihood status of fisher community of the Jamuna river near Sariakandi Upazila of Bogra district of Bangladesh from August to December, 2015. Data were collected through the use of well-structured questionnaire from 40 fishermen of the selected area. The survey revealed that most of the fishermen were belonged to the age groups of 30 to 50 years (58.00%), represented by 87% Muslim. About 65% of the fishermen had small family with 3 to 4 members; 22% had medium family with 5 to 7 members and 13% had large family with more than 8 members. Over 56.5% of the fishermen solely depend on fishing as their occupation. Besides fishing, 23.5% was engaged in agriculture, 9% in daily labor activities, 5% livestock rearing and 6% small business. About 14% of the fishermen were only could write name while 74%, 10% and 2% of the fishermen were illiterate, primary and secondary level of education respectively. About 68.5% of the fishermen received health service from village doctors, 21.5% from Upazila health complex and remaining 10% got health service from MBBS (Bachelor of Medicine and of Surgery) doctors. Most of the people (55%) have kacha house with tin roofing, 32.5% have house with straw roof, 9.5% have semi-paka house and only 10% of the people have paka house. Majority (45%) of the fishermen had medium (61,000-1,20,000 TK.) annual income whereas 23% of the fishermen had low (35,000-60,000TK.) annual income and 32% of the fishermen had high (above 1,20,000 TK.) annual income. The poor condition of most of the fisher may be due to scarcity of alternate employment opportunities, low education facilities, lack of nearby market for selling of fish, lack of sanitation and credit facilities, non-availability of own fishing net and insufficient government support such as Vulnerable Group Feeding cards.

INTRODUCTION

The fisheries of Bangladesh represent a remarkable natural resource with an intimate connection with the life of the people of the country. Fisheries sector is contributing imperatively towards the economic development of Bangladesh and in the alleviation of rural poverty. About 6 million peoples are directly or indirectly engage in this sector (DoF, 2015). A large portion of rural family members are engaged in fishing from the rivers and other open water bodies.

The area of inland open water capture fisheries is 3.91 million hector which contribute in the total fish production of the country is 995805 metric ton (DoF,2015) and rivers are the most principal source of inland capture fisheries. About 700 river

flows through the country with their tributaries and distributaries, the total length of which is about 24,140 kilometers (Wazed, 1991). From the ancient period fishermen are engaged in fishing in the river for their livelihood.

Fishermen are one of the most vulnerable communities in Bangladesh. They are poor by any standard and over the years economic condition of the fishermen had further deteriorated. Alam (2008) estimated the average per capital annual income of the fishermen families to be BDT 2,442 i.e. about 70% lower than the per capital income of the country as a whole. Being an isolated community fishermen are deprived of many amenities of life.

A livelihood is sustainable when it enables people to cope with and recover from stresses and shocks

and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base (Chambers, 1992).

Jamuna river has great influence on fisheries and livelihood of the fishermen of Sariakandi Upazila as well as the entire fishing community adjacent to the river. This river plays a very important role in view of income, employment generation and supporting livelihood to the poor fishing community. But enough information regarding status of the fisher community of Sariakandi Upazila is unavailable. The present study is therefore, an attempt with an aim to investigate the socio-economic condition of the fisher community of this area.

MATERIALS AND METHODS

Fishermen of Jamuna river near Hindukandi and Kalitola area under Sariakandi Upazilla of Bogra district was considered for the study. No study was conducted previously in this river area. At first, primary information was collected from District Fisheries Officer (DFO), Bogra, Upazilla Fisheries Officer (UFO), Bogra Sadar and ADC (Revenue) regarding the concentration of the area for status of the fishermen in the Jamuna river. On the basis of this information, a preliminary survey was conducted in the study area. Finally, decision was taken for the study of this river. This study was conducted for six months; from May to October 2016. Frequent field visits (twice a month) were made during this time to collect necessary information. For data collection from the fishermen of Jamuna river a questionnaire was prepared in accordance with the objectives of the study. Primary data were from the questions related to the fishermen and their socio-demographic status, income and occupation of fishermen, family size, health and sanitation facilities, fishing gears, credit facilities etc. were included in the questionnaire. Primary data from 40 fishermen were collected through personal interview supplemented by multiple methodological Participatory Research Approach (PRA) tools such as Focus Group Discussion (FGD) and Crosscheck Interviews (CI) with key informants at home or river sites during fishing. Secondary data included relevant information on socio-economic status of fishermen were collected

through literature, publications and quarterly and annual reports available from Upazila Fisheries Office. All the collected information were accumulated and analyzed by MS-Excel and then presented in textual, tabular and graphical forms to understand the present status of the livelihood status and constraints of the fishermen of the studied area.

RESULTS AND DISCUSSION

Human Capital

Religion and age structure

Muslims were featuring as the absolute majority of the fishermen. About 87% and 13% riverine fishermen were Muslims and Hindus respectively. Age structure of the sampled fishermen was examined based on three selected age groups such as, young (20 -30 years), middle aged (30-50 years) and elderly people (50-70 years). Results of the present study revealed that 58% of the respondents belonged to age group of 30-50 years, while the elderly people constituted a very small proportion (14%) of the sampled population as opposed to young people (28%) in (Figure 1). Ali et al. (2009) found that most of the fish farmers (50%) belong to age group of 31 to 40 years in Mymensingh district. Bhaumik and Saha (1994) reported that age structure of fishermen at Sundarbans was ranged from 20 to 70 years which is more or less agreed with the present findings.

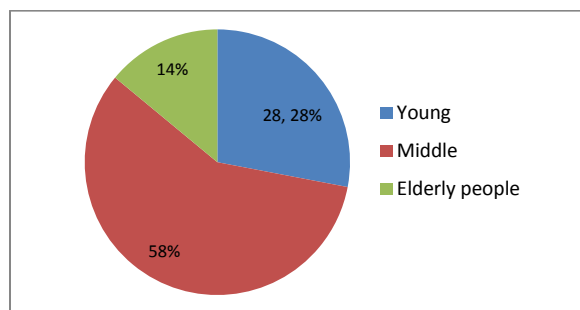


Figure 1
Age distribution of the fishermen.

Family size and type

The fishermen were grouped into three categories according to family sizes such as, small family (3-

4 members), medium family (5-7 members) and large family (8-12 members). From the present survey, it was found that about 65% of the fishermen had small family with 3 to 4 members; 22% had medium family with 5 to 7 members and 13% had large family with more than 8 members (Figure 2) whereas most of the fishermen (45%) belonged to 4 to 5 member's family in Mymensingh district (Ali et al., 2009). This variation might be the result of geographical differences.

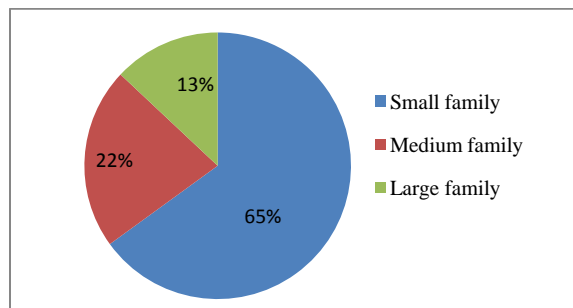


Figure 2
Family size of the fishermen.

Educational status

Most of the fishermen are illiterate (74%). Small portion of them can sign only (14%). Some are primary level of educated (10%). Very small portion of the fishermen were from secondary level (2%). (Figure 3). Mahabubur, (2001) reported that 68% of *hoar* fishermen were illiterate, 28% up to primary level and 4% had only secondary level education which is similar with the present study.

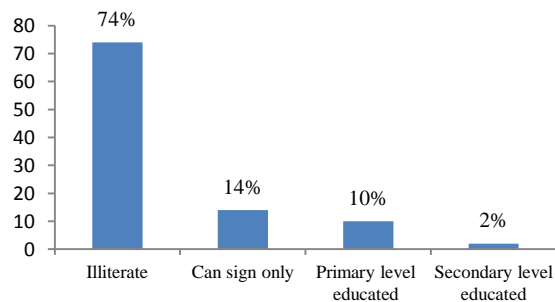


Figure 3
Educational status of the fishermen.

Financial capital

Annual income of the fishermen

In the study area, it has been observed that 23% of the fishermen had low (35,000-60,000TK.) income, 45% of the fishermen had medium (61,000-1,20,000TK.) income and 32% of the fishermen had high (above 1,20,000 TK.) income. (Fig.4). Islam (2012) studied on Tangon river found that, the majority (55%) of the fishermen belonged to the medium income (Tk. 36,000-60,000) group, followed by 25% of the fishermen in low income(Tk.10,000-35,0001) and only 20% of the fishermen had income in the range of (TK. 61,000-90,000).

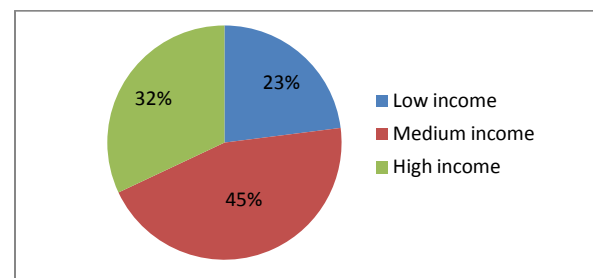


Figure 4
Annual income of the fishermen.

Credit access

The national and local NGO like BRAC, Asha provide credit only to the organized poor members to purchase fishing gears and boats. After repayment only 35% became self sufficient who did not need financial help but 16% borrow money from their neighbours, 18% from relatives, 25% from NGO and 6% from cooperatives for their fishing business (Fig.5) which was similar to the findings of Alam et al. (1995) in Natore district.

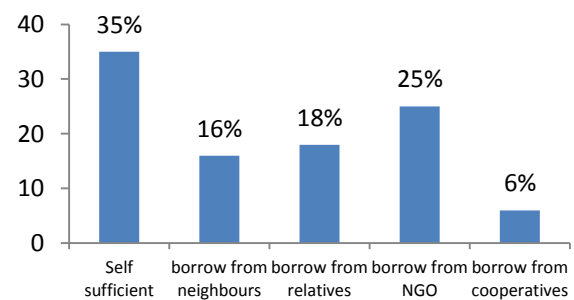


Figure 5
Credit access of the fishermen.

Occupational status

From the data collected, it has been observed that fishing is the most common occupation of the fisher community in the Sariakandi Upazila. However, besides fishing some of them are also engaged in other profession such as agriculture, livestock rearing, small business and as day labor. The present study has revealed that most of the fishers (56.5%) are engaged in fishing as their only income source. However 23.5% are engaged in agriculture with fishing, 9% are daily labor along with fishing, 5% are involved in livestock rearing whereas 6% are engaged in fishing and small business (Figure 6) which was more or less similar to the findings of Islam (2009).

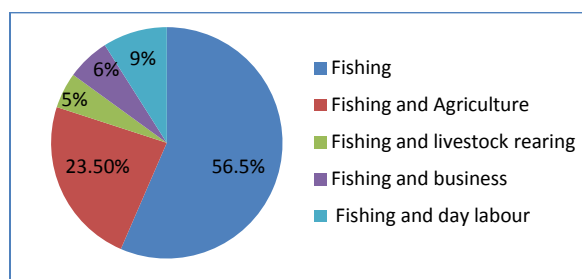


Figure 6
Occupational status of the fishermen.

Physical capital

Housing condition

The nature of house was indicates the social status of the people. The housing conditions of fisher were divided into four categories: 1. House with straw roof, 2. *Kacha* house with tin roofing, 3. *Semi paka* house with tin roof and brick wall upto base of the window and 4. *Paka* house with tin roof and brick wall with concrete floor. From the survey, it was found that the most of the people (53%) have *kacha* house with tin roofing, 27.5% have house with straw roof, 11% have *semi-paka* house and only 8.5% of the people have *paka* house. (Figure 7) Alam et al. (1995) found that about 82.22% of household structures were *kancha* whilst 11.11% were *semi-paka* and only 6.66% were *paka* of the Basantapur *beel* fishermen.

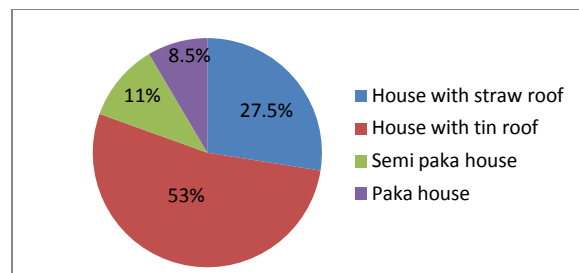


Figure.7
Housing condition of the fishermen

Health facilities

In the study area health facilities of the fishermen were poor and it was found that 68.5% of the fishermen households were dependent on village doctors who did not have any understanding and knowledge of medical science, 21.5% of the fishermen got health service from upazilla health complex and remaining 10% got health service from MBBS doctors (Table 1) which was more or less similar to the findings of Ali et al. (2009).

Table 1
Health facilities of the fishermen of the Jamuna river near Sariakandi upazila.

Health services	Number of fishermen (n=60)	Percent of fishermen (%)
Village doctor	40	67
Upazila health complex	18	30
MBBS doctor	2	3

Sanitation facilities

Four types of toilet facilities were found to be used by the fisher community in Sariakandi. These toilets were: *katcha*, *semi-paka*, *paka* and hanging toilets. Hanging toilets are posing threat to public health. Among the sampled fishermen 68% were found to use *katcha* toilets, 22% *semi-paka* toilets and 4% *paka* toilets. It is noteworthy to mention that 6% of the fishermen use hanging toilets (Figure 8). Kostori (2012) found that 16% of toilets were *katcha* while 64% and 20% were *semi-paka* and *paka*. There were some dissimilarities due to geographical variation.

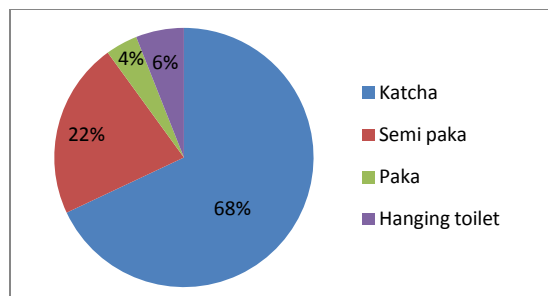


Figure 8
Sanitation facilities of the fishermen.

Electricity facilities

From the present survey, it was found that there were no electricity facilities for the fishermen.

Fishing nets and gear used

Several forms of nets and gears are being used in the Jamuna river near Sariakandi by the fishermen as cast net (*Jhaki jal*), sein net (*Ber jal*), gill net (*Current jal*), drag/push net (*Moiya jal*), push net (*thela jal*), gill net (*poa jal*), lift net (*Dharma jal*), trap (*Bair, Chandi bair, chai*), hook and line (*Chip borshi, Chara borshi*), etc. Tanvin Ara et al. (2010) found 7 types of gears, 8 types of trapes, 5 types of hooks and spears used in the capture fishery of beel Dakatia.

Socio-economic constraints of the fishermen

Most of the fishermen are facing various problems during fishing and marketing their goods. The problems were inadequate credit facility, pressure from *mahajon*, lack of marketing facilities, lack of knowledge of fishing, lack of appropriate net and gears and disturbances by robbers and thieves and sometimes by the local people themselves. Most of the fishermen were very poor and they have limited resort to buy nets and other fishing equipment.

CONCLUSION

The socio-economic condition of the fishermen in the Sariakandi Upazila near Jamuna river were not satisfactory. The fishermen were deprived of many amenities. Due to the lack of awareness as well as the poor income of the fishermen families,

educational development is not satisfactory. So why, some educational institutes should be built up in the adjacent area. The studied areas are situated far away from town area and due to lack of nearby market; they have to depend upon the wholesalers and middlemen for their fishes to be sold. As a result they did not get the actual price that they should get for the fishes. Establishment of a suitable fish market near the study area by the DoF can be a solution of their deprivation. The Government should take some important management policy as well as providing of some alternate income generating activities and VGF cards during the ban season of the fishing. Some forms of NGO's activity must be ensured in the adjacent area for the improvement of the life leading status of the fishermen. Loan facilities as well as health facilities have to increase by the government assistance to ensure the sound socio-economic condition of the fishermen.

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